

*D. W.*

# Easington Rural District

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## REPORT

OF THE

## MEDICAL OFFICER OF HEALTH

For the Year ending December 31, 1909.

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WINGATE,  
February, 1910.

Gentlemen,

I beg to submit to you my Annual Report of Vital Statistics and Sanitary Work for the year ended 31st December, 1909.

During the year 917 deaths occurred of persons belonging to the district, of which 888 took place within the district and 29 without, and 1,984 births were registered.

The death rate of persons belonging to the district was 16·10 per thousand of population, against 19·55, the average for the previous twenty-nine years. For the two previous decennial and remaining nine-years periods the average rates were respectively 20·20, 19·79 and 18·28.

The birth rate was 34·85 per thousand of population, against 39·02, the average for the previous twenty-nine years. For the two previous decennial and remaining nine-years periods the average rates were respectively 40·93, 39·07 and 37·35.

The death rate is 46·19 per cent. of the birth rate, against 45·66, the average for the previous twenty-nine years.

The number of deaths under five years of age was 455, being 49·61 per cent. of the total deaths, against 51·13, the average for the previous twenty-nine years.

The number of deaths under one year to one thousand births was 153, against 170, the average for the previous twenty-eight years.

Twenty-eight deaths were of persons over eighty years of age, only one ninety: twelve males with an average of 82·4 years, and sixteen females with an average of 84·0 years.

217 deaths occurred in the first quarter, 208 in the second, 236 in the third and 256 in the fourth.

Seventy-one deaths were certified by coroner's inquest or order and fifteen deaths were registered as uncertified.

Twenty-one deaths occurred at the Union Workhouse, fourteen of persons belonging to the district and seven of persons not belonging to the district: two infants, three from tubercle, five from nerve disease, two from heart disease, one from pneumonia and the rest, of whom four were over eighty, from senility.

Eight deaths occurred at the Infectious Diseases Hospital.

Of the twenty-nine deaths outside the district, twenty-eight were in Public Institutions: four at the County Asylum, Sedgefield, seven at Sunderland Infirmary, ten at Hartlepool Hospital, three at Sherburn Hospital, two at Seaham Harbour Infirmary and one each at Durham County Hospital and Harton Workhouse. One death was at Sunderland in a private home.

The deaths from the principal zymotic diseases were 1·54 per thousand of population, against 2·00, the average for the previous twenty-eight years. They were:—

	Under 5	Over 5	Total
Measles ... ..	46	—	46
Scarlet fever ... ..	3	—	3
Whooping-cough ... ..	3	—	3
Diphtheria (including membranous croup)	11	9	20
Enteric fever ... ..	1	14	15
Continued fever ... ..	—	1	1
	—	—	—
	64	24	88

TYPHUS FEVER.—No case of this disease has appeared in the district since 1895.

SMALL-POX.—Since 1905 only one case has appeared in the district, in 1908.

MEASLES.—In the previous year the incidence of this disease in the district was slight. This year, at the end of the first quarter, it appeared at Seaham—imported from an adjoining district, became epidemic in the second quarter and extended into the third. It then extended into the northern localities generally. Its epidemicity was



most marked at Murton and Shotton, though it appeared more or less in every locality in the district, ending in the extreme south of the district in the fourth quarter. Although the number of cases compared with previous epidemics was small, the case mortality was unusually great, about 3 to 4 per cent., and, excepting some of the youngest which terminated abruptly with convulsions, were all complicated by broncho-pneumonia in consequence, no doubt, of the cold winds then prevailing. The infant department of the schools at Castle Eden Colliery, Shotton Colliery and East Hetton were closed, and a small mixed school at Seaton attended by children from a scattered rural parish. Beyond this, school closing was not adopted. The practice of exclusion, as recommended in the recent memorandum on the subject, was advised and was found to be sufficient. Mostly young children were attacked, and the result on the attendance at school of the elder children was insignificant.

SCARLET FEVER.—During the last four years there has been a steady though slight decline in the number of cases of this disease. Its equal incidence throughout the year is unusual: 76 in the first quarter, 55 in each of the other three. Though in no locality has it been markedly epidemic every locality has been visited, and where the incidence was high the previous year it has been lower this, and *vice versa*. It is worthy of note that large villages traversed by through roads where there is most traffic have the greatest incidence, e.g., Shotton, Haswell and Wingate, while large villages not so situated have the least. Murton, one of these, has been for many years remarkably free. Its immediate source of origin is sometimes traced (and in two it was by infection from imported town manure), but not often. This is not surprising when the nature of the disease is assuming a much milder type. In 1905 the case

mortality for the first time on record was *nil*. During the next three years it was 3·1, 2·6 and 1·07 respectively. This year 1·24 per cent., and the fatal cases were all of very young children, presumably of renal complications, as they each died in convulsions. Although instructions are sent to each infected house as to precautions to be observed to prevent infection, the slight indisposition frequently experienced makes people careless and infection easier. In no instance was a case found in a house in connection with milk or other food supply.

WHOOPING-COUGH.—This, which had been very prevalent during the previous four years, has considerably diminished. Although very fatal, this is often a neglected ailment, and instructions were given to school teachers and attendance officers to more carefully exclude children attending infant schools from infected houses. It is still prevalent in Shotton, Thornley and Hutton Henry.

DIPHTHERIA.—The incidence of this disease in the district, though not so high as in some past years, is in excess of the average. It appeared in every month, and to a greater extent in the colder seasons. The numbers in the four quarters were 31, 25, 20 and 31 respectively, shewing the greater susceptibility to infection when simple sore throats are more common. 21 per cent. were slight cases, and in the absence of bacteriological examination may have been non-infectious. The others were all well marked. No locality was exempt. The rates in them varied from 0·74 to 4·41 and, except in the highest and lowest, there was a remarkable similarity in the rate of incidence throughout the district. The case mortality varied from *nil* in two localities to 40 per cent. The highest mortality coincided with the lowest incidence. The following table shews the number of cases, attack rate per

thousand of population and case mortality per cent., with former years for comparison:—

Year	No. of Cases			Rate	Mortality	
1900	...	13	...	0·32	...	23·07
1901	...	14	...	0·34	...	14·28
1902	...	77	...	1·75	...	20·77
1903	...	92	...	2·08	...	19·56
1904	...	62	...	1·36	...	17·74
1905	...	98	...	2·07	...	18·36
1906	...	85	...	1·72	...	14·12
1907	...	111	...	2·12	...	18·01
1908	...	70	...	1·28	...	11·42
1909	...	107	...	1·88	...	18·69

The 107 cases occurred in ninety-four households, twelve of them having multiple cases in which it is fair to assume that the first infected the second. Besides these, in only six cases was it possible to obtain evidence of infection by direct contact in an infected house. School attendance is generally regarded as a potent factor in infection. Half the cases were at school age, and this was specially inquired into at the schools, but in no instance were two infected children to be found in the same class, nor connected with each other so far as school life was concerned. The milk supply was particularly investigated, with the result that in the infected houses fresh milk was used in only 79 per cent., and among these was used as an article of food in only 22 per cent., and that very sparingly. Of cases in connection with food supply there were four, with no traceable results. Three were associated with scarlatina. Housing conditions were noted, with the result that eight were distinctly dirty in their interior, seven were damp, twenty had defective sanitary surroundings calling for notice to remedy. As to housing accommodation, excluding a few in the houses of the well-to-do, nearly the whole were found in workmen's cottages, mostly



clean and well kept, in houses of two to five rooms, on the average at the rate of 1·88 persons to one room. In considering the origin and continuance of these cases it is clear they are mostly sporadic, and when it is noted how frequently the disease in a child has a history of playing in a refuse heap near a cesspool or opened drain the indications for prevention are in the direction of drainage, accumulations of refuse and sewage-sodden surfaces. The disease was almost foreign to the district before 1900, and having been introduced, the germs have been preserved and propagated in the ways mentioned to a much greater extent than by personal contact, though by this means probably much more than can be ascertained. One undoubted fact is that when well introduced into a village it is apt to continue.

The cases in the different localities were :—At Easington, five (attack rate 2·16, mortality 20) : one from infection of year before ; two in a house with defective conveniences ; one in a better-class house, with no history ; one at the Workhouse where a drain had been opened. Haswell, five (attack rate 0·74, mortality 40) : one in a good house with poor state of ashpit and drains ; two in a house, damp and with defects of house and ashpit ; one in a house with defective ashpit ; one in a good house, with no traceable cause. Shotton, fifteen (attack rate 1·41, mortality 26) : three in one house with defective drainage ; two at a farm, with no history ; one in a damp house, after scarlatina ; four in very dirty houses ; one probably by contact ; four in separate houses, with no history. Castle Eden group, twelve (attack rate 3·18, mortality 16) : two in damp farm houses, one of them after measles ; nine in clean houses with no defects, but on a route much infested by tramps ; one in a good house, mild and doubtful. Murton, thirty-three (attack rate 4·41, mortality 24) in thirty houses :

three by direct contact; two in dirty houses with defects; two after measles; ten in clean houses with defective drainage; the rest in clean houses, free from defects, where undiscovered contact by mixing in houses had probably obtained. Thornley, five (attack rate 1·20, mortality *nil*): one after playing on a refuse heap; two in a good house, probably by infection from outside; one in a good house, with no traceable history and mild; one with no history, mild and doubtful. Wingate, sixteen (attack rate 1·63, mortality 12): Wingate, four, all in clean houses, one damp; all mild and with no history. Wheatley Hill, twelve: one with history of infection from midden heap and fatal; one in a very dirty house; one in a damp house; the rest in clean houses with no marked defects and mostly mild. Hutton Henry, seven (attack rate 1·15, mortality 14): one in good surroundings was probably infected from midden refuse; three in dirty houses, one of them damp; one in a house where there was scarlatina; two, one rapidly fatal, in good houses, with no traceable cause of origin. Seaham, nine (attack rate 1·49, mortality *nil*): one in a house raided by mice from some undiscoverable cause; and one infected from it; one probably from a drain; one in a house clean but damp; the rest in new houses of very superior type, with no clue as to their origin, unless from undiscovered contact.

Two cases of membranous croup are included in the diphtheria.

ENTERIC FEVER.—The incidence of this disease has been unusually high. It has not occurred over the district generally, nor has it, as in former years, appeared when most favoured by climatic and seasonal influences in the later months of the year. The outbreaks were localised and began early, the most serious one in February. Two localities were totally exempt. The incidence



in the others varied from 0·29 per thousand of population to 7·44. The mortality varied from *nil* in two localities to 50 per cent. Combined with continued fever the incidence on the whole district was 1·79 and the case mortality 15·7 per cent. To obtain an idea of the actual incidence and its severity these figures must be adjusted. A case is sometimes considered doubtful and notified as continued fever when it afterwards develops into well marked enteric, dies and is registered as that. In other cases where sudden rise in temperature is notified as enteric, and is followed by complete recovery in two or three days, or, again, the case proves to be an uncomplicated pulmonic one. This is frequently intimated. In all the tables the notifications are those first made, but after allowing for these dubious cases the probable enteric rate would be 1·26 and the case mortality 22 per cent. In the largest connected group of undoubted cases the case mortality was 27 per cent. The other outbreaks were mostly sporadic, and connection between different houses was in only a few cases established. The 89 cases occurred in seventy households; two entered the district infected and two were probably infected while visiting outside. In one group of four occurring simultaneously cerebral symptoms were so marked in these at the onset that cerebro-spinal fever was at first suspected. Three cases occurred within a fortnight after eating raw water-cress bought from an itinerant vendor who could not be traced. In no instance was drinking water or milk suspected. In 25 per cent. of the houses either tinned milk or none was used. In 40 per cent. the typical diarrhoea was absent. 20 per cent. of the infected houses were very dirty in their interior. In a third of the houses defects in sanitation were observed. I was informed that it was not an infrequent practice that the inspection chamber in the yard had been plugged and the receptacle thus formed used for

washing potatoes or other domestic purposes. The following table shews the number of cases, the attack rate per thousand of population and the case mortality per cent. in the district since the adoption of the Notification Act:—

Year	No. of Cases		Rate		Mortality	
1893	...	332	...	8·07	...	12·65
1894	...	101	...	2·38	...	23·76
1895	...	87	...	2·01	...	19·54
1896	...	54	...	1·26	...	14·81
1897	...	34	...	0·89	...	20·58
1898	...	74	...	1·89	...	29·72
1899	...	33	...	0·83	...	18·18
1900	...	69	...	1·74	...	4·34
1901	...	115	...	2·80	...	12·17
1902	...	47	...	1·07	...	12·76
1903	...	35	...	0·79	...	17·13
1904	...	38	...	0·83	...	26·31
1905	...	45	...	0·94	...	35·55
1906	...	50	...	1·01	...	24·00
1907	...	23	...	0·44	...	17·38
1908	...	90	...	1·64	...	18·88
1909	...	89	...	1·56	...	16·85

Their occurrence and distribution in the district were:—Easington, one case at the Workhouse from outside the district, in a dirty and verminous condition. Haswell, two (rate 0·29, mortality 50): one in a dirty, poverty-stricken and dilapidated house which was closed after statutory notice; one in a clean house with defective ventilation and privy. Shotton, seventeen (rate 1·64, mortality 11): six at Shotton Colliery village, four in dirty houses not connected, two in a new house, probably from outside infection; eleven at Horden, all in good houses satisfactory as to structure and surroundings; no connection could be traced between any of them; there was suspected infection from vegetables and connection with outside. Castle Eden group, six (rate 1·59,

mortality *nil*): one by infection from a Hutton Henry case, the others in three houses with no connection with each other, one had a blocked drain with a sewage-soaked surface near the door. Murton, six (rate 0·80, mortality 16): one from an infected house of the previous year; one in a poor dirty house with blocked drain; four separately, no traceable origin; one a woman after parturition. Thornley and Kelloe, eight (rate 1·93, mortality 12): a sporadic case occurred in a clean house in February, removal to the hospital was declined, with the result that another five members of the same family living in two houses were infected; two other cases were mild and unconnected. Wingate, twenty-one (rate 2·15, mortality 19): three in a damp house, defective in itself and its sanitary surroundings; three in one street where the drainage had been blocked; three were pulmonary cases and one meningitis; the rest were mild and not connected. Seaham, two (rate 0·33, mortality *nil*): one in a new house with most satisfactory surroundings; neither had any clue to their origin. Hutton Henry: there were twenty-six in this township (rate 7·44, mortality 23), all in the Station Town village of this group. The first case appeared in February, the rest followed within a period of less than three months. Fifteen cases occurred in nine houses in or abutting on one street, and six cases in three houses in distant streets by direct infection from the first by intimately mixing, assisting at funerals and eating food in infected houses. At one infected house only, in another street, no connection was admitted to have taken place. Twenty-two cases in seventeen houses, of a virulent type, in each case with typical symptoms present, and of these, six, or 27 per cent., were fatal. The origin of the outbreak was not far to seek. The infected street was being made, and for that purpose over a foot of the surface was excavated, and that surface had been soaked with



sewage thrown on to it by the occupants for over thirty years. After the street was completed there was not another case. Four other slight unimportant cases notified had no connection with the outbreak in time or locality.

CONTINUED FEVER.—Three of these were fatal: one senile with pulmonary complication, two young persons registered as enteric. Half were of children or young persons, half in September, the time for enteric to appear, and most were mild and unimportant.

DIARRHŒA.—This was not a markedly diarrhœa year, though there was the usual prevalence in the third quarter. The deaths were 4·14 per cent. of the total deaths, against 5·42, the average for the preceding twenty-six years, and including enteritis, the deaths from which were only the average in the third quarter, the percentage of total deaths was 6·32. 93 per cent. were of children under five years, the same as the previous year.

PUERPERAL FEVER.—The proportion of cases to births was 0·15 per cent., against 0·31, the average for the previous sixteen years, and the fatality among these was 33 per cent., against 54 for the same period. One was in a young unmarried woman, one attended by a midwife and not really puerperal sepsis, and one attended by a registered practitioner. Disinfection followed in each case. This is the lowest incidence on record.

TUBERCULOSIS.—The deaths from pulmonary phthisis were 0·66 per thousand of population, from other tubercular diseases, 0·80, from all other respiratory diseases, 2·56. Notification under the "Public Health (Tuberculosis) Regulation, 1908," has been in operation during the year. Eleven notifications were made for nine cases. All were visited by your Medical Officer, and printed

instructions and pocket spittoons were supplied and instructions generally given, with disinfection on removal or death. The Council makes an annual contribution to a Sanatorium in the County, to which several persons, not all in receipt of poor relief, have been sent with excellent results. The memorandum of the Local Government Board on tuberculosis was considered by a special Committee with the assistance of the Clerk and Medical Officer of Health.

PHYSICAL FEATURES AND GENERAL CHARACTER OF THE DISTRICT.—The surface of the district is undulating from the coast line at sea level to nearly 500 feet. The soil is generally boulder clay, with sometimes beds of sand and gravel. The whole is underlain by the magnesian limestone which, in a few places, crops out at the surface. Of the nine divisions, number one, Easington, and number four, except Cold Hesleden, are agricultural. In the other divisions, with the exception of a few farms, practically the whole population is employed in coal mining and is located in villages beside the collieries. The climate is dry and cold.

HOUSE ACCOMMODATION.—Over ninety per cent. of the population are engaged in mining and live in houses mostly owned by the colliery companies. The first houses, erected about eighty years ago, were of limestone, on plans inferior to present day requirements. Thirty-five years ago they began to be built of brick and were better than the oldest although inferior to those erected during the past ten years. The demand for houses is at present in excess of the supply, and this will continue while the coal trade remains brisk. Building operations both by public companies and private enterprise are still going on and should be encouraged. These are now of a superior type. All plans, with block plans of new streets, are submitted to your

Council, and before occupation are certified by your Surveyor.

Subject to these conditions, plans have been passed for 1,267 houses at the following places:—Easington, fifty-six colliery workmen's houses, forty-four private cottages, one house of a better class, one house and shop and one school; Haswell, seven private cottages, fifty-four houses of a better class, one house and shop, one villa, two double-houses, one public building and three stables; Shotton, five houses of a better class, one house and shop; Horden, 279 colliery workmen's houses and forty-one of a better class, five houses and shops and three public buildings; Castle Eden, two cottages, thirty houses of a better class, four double-houses, one shop and one public building; Murton, one private cottage, two houses with shop, four double-houses, one public building and one stable; Thornley, sixteen private cottages, nine houses of a better class and two public buildings; Wingate, Trimdon, eighteen private cottages, two houses of a better class, one shop and one public building; Wheatley Hill, sixteen private cottages, eight better-class houses, two houses and shops and one public building; Hutton Henry, one private cottage and four villas; Monk Hesleden, 527 colliery workmen's houses and fifteen of a better class, two private cottages, six houses and shop. The Surveyor has put the work of the Building Plans Committee into a tabular form, which will be found in the appendix.

New Bye-laws for Streets and Buildings and Cleansing have, after very long and careful deliberation by a special Committee, been adopted and approved by the Local Government Board, based upon the Rural Model Series, with numerous amendments and modifications suited to the needs of this district.



SEWERAGE AND DRAINAGE.—A large amount of new work has been done in this. The system of purification by bacterial filters for the sewage of Thornley and Wheatley Hill was, owing to increasing size of these villages, found to be too small for the amount of sewage, with the result that some untreated found its way into the stream. Fresh land has been obtained on which an extension of the system is now being constructed, which it is expected will be found to be sufficient, and a Local Government Board Inquiry is about to be held for the raising of the necessary money by loan. The bacterial installations at Murton and Shotton have been in constant operation, but not without defects, mainly with the sludge. These have been mostly remedied by alterations or improvements. All the bacterial filter systems have given trouble at first, and none have worked so satisfactorily as they were expected to. Your Council, having the system of New Seaham as an example, have come to the conclusion that drainage direct to the sea, when available, is the most satisfactory. The sewage from the villages of Haswell and South Hetton has been partly treated by bacterial filters. To avoid river pollution occurring from the remaining parts, several schemes have been suggested and considered. Extensive schemes have been prepared by your Sanitary Surveyor for a main outfall to the sea for the villages of Horden Colliery, Blackhall Colliery, Easington and Thorpe; a combined scheme for Haswell, South Hetton, Murton, Dalton-le-Dale, Cold Hesleden, Seaton and Seaham; and a main sewer for Easington Colliery, north of Seaside Lane, Easington, from the Waterworks to the North Eastern Railway. For the purpose of these, tidal observations on the shore by the Surveyor's staff, extending over six weeks, as ordered by the Board of Trade and Local Government Board, have been made at Horden, but owing to the difficulties presented during the bad weather they have been

postponed at other places until the spring. A scheme for the treatment of the sewage from Easington by bacterial filters was also prepared and considered. One scheme only, namely that for the combined sewage of the villages of Haswell and South Hetton and other places enumerated above, by a main outfall to the sea, has been fully decided upon and ordered to be carried out. An undertaking has been given for the treatment of the Seaton and Seaham sewage within the ensuing twelve months. These schemes involve great additional work upon the staffs of the Clerk and Surveyor, including surveys and plans, sanctions of the Local Government Board, the Board of Trade and the Commissioners of Woods and Forests, the acquisition of necessary easements and lands, Local Government Board Inquiries, provision of necessary loans and the letting of the works before they are actually commenced.

Besides maintaining in efficiency and cleaning tanks, filters and drains, and cleaning out Hesleden, Wingate and South Hetton becks and other work, new sewers have been laid: 6" 170 yards, 9" 1,300 yards, 12" 450 yards, 15" 510 yards, 18" 230 yards, total 2,660 yards; and old sewers relaid: 6" 210 yards, 9" 681 yards, 12" 1,085 yards, 18" 460 yards, total 2,436 yards; with sixty-one manholes and ten ventilators throughout the district at the following places:—

Murton.—Albion Street, Silver Street, Alfred Street, Talbot Street, Dene Terrace and the road up to and including East Murton village, and connecting these with the bacterial system, new sewers: 800 yards 9", 310 yards 15"; old sewers relaid: 285 yards 9", 735 yards 12", 460 yards 18"; with twenty-six manholes and seven ventilators.

Seaham and Seaton.—To drain newly erected houses there: 430 yards 9" new sewers with seven manholes, one ventilator and sludge pit.

Easington and Thorpe.—For new houses at colliery village, new sewer: 170 yards 6", 450 yards 12"; old sewers relaid: 50 yards 6"; with ten manholes and one ventilator.

Monk Hesleden.—For new colliery village: main sewers, 200 yards 15", 230 yards 18"; with thirteen manholes.

Haswell.—Piping in ditch at Haswell Terrace, new sewer: 70 yards 9"; old relaid sewers: from Long Row to Low Row, Haswell Colliery, 160 yards 6", Back Lane, village, 246 yards 9".

Kelloe.—To improve drainage of houses at Davy Lamp, relaid 150 yards 9" sewers, with three manholes and one ventilator.

Wingate.—Relaying surface water sewer from streets south of Gore Beck, at Wheatley Hill, 350 yards 12", with two manholes. The Gore Beck has been converted into a culvert in concrete 18' wide, 2' 6" deep, for a length of 260 yards, where it runs beside the houses in that village, and the Beck has been lowered at the end of the culvert.

PRIVATE STREET WORKS ACT.—Under this Act, Back Lane and Chapel Lane, Haswell, Rodridge Street and East Terrace, Station Town (Hutton Henry), have been completed and apportioned. North Back Hartlepool Street, Thornley, and Back Church Street, Wheatley Hill, are now in course of construction. Negotiations to make Rodwell Street, Trimdon, conjointly with Sedgefield District Council, failed, and as this was urgently needed your Council have resolved to do it unassisted. Plans for this have been prepared and approved along with the approach to the infant school at that place. Instructions have also been given to the Surveyor to prepare plans to make up Vane Street, Aclom Street, Garden Street,



street between Millbank Terrace and East View, and back street between Front Street and East Terrace, Station Town, and Back Lane and Chapel Lane, Easington. The work of street making should be vigorously forwarded in colliery villages, especially where the back streets are habitually used. When plans for new streets are being passed the construction of the houses will indicate which side of the house will be used by the occupants, and this should determine on which side the best street should be made. When, as is often the case, the back street only is used, making it in preference to the front would have the double advantage of increased comfort to the occupants and of being less costly. Back streets need not be so elaborately made as front streets. When the back street is used for entrance and is a quagmire in bad weather, the well-made front street is of little value. The worst back street in the district is that between Vane and Aclom Streets at Station Town, and might be first tried to experiment with in a cheap way.

**WATER SUPPLY.**—The village of South Hetton is now supplied by the Sunderland and South Shields Water Company by stand pipes in the streets or taps inside the houses, at the option of the occupants. The supply in like manner for High Wheatley Hill and Wingate Lane is now from the same source as Thornley, the Weardale Steel, Coal and Coke Company. The supply to Hutton Henry village and South Wingate was the subject of much complaint. This was due to the slight difference in level between the reservoir of the Wingate Water Company and the storage tank at that place. A stand pipe, giving an extra head of fifteen feet, has been erected at the Wingate reservoir, and the defective supply is now almost remedied and will be satisfactory after some further contemplated improvements are completed. A territorial camp

of 3,500 men at Monk Hesleden was supplied by the Council's service, and an extension of the water main was made at Back Hartlepool Street, Thornley. The permanent services of a plumber have been added to the Surveyor's staff for the maintenance of water mains and pants belonging to the Council, and extensive overhauling of works at Easington have effected a large saving. Two samples of water have been analysed. One, at a farm, was found to be unfit for use, and negotiations are now being made to obtain a supply from a public company.

INSANITARY PROPERTY.—Though the old insanitary houses are slowly disappearing, there is much yet left. Lots of these have been reported at each meeting, and have been dealt with on a more extensive scale than formerly. The chief structural defects are the attic rooms and the outdoor conveniences, and when, added to this, there was general dilapidation, much less indulgence has been shewn than formerly. Many repairs have been made by owners and drainage improvements carried out as the result of communication with your officers, without resort to statutory notices. Besides dealing with houses for which statutory notices had been served the previous year, forty-two statutory notices under the Housing of the Working Classes Act have been served for 103 houses, and ten appearances have been made at the magistrates' court to put these in force. When nothing has been done in a reasonable time after serving notice, the Council have decided to apply for closing orders. By this and other means improvements have been made to old property at the following places:—

Easington.—Ten notices for twenty-four houses: fourteen have been repaired, two are receiving attention, two nothing done, six have been closed by magistrates' orders.

Haswell.—Nine notices for twenty-eight houses: two have been rebuilt, six repaired, four having attention, fourteen closed by owner and three by magistrates' order.

Wheatley Hill.—One notice for two houses—both being repaired.

Thornley.—Three notices for eleven houses: one has been repaired, two rebuilt, one lot of eight the owner has promised to rebuild, two a-year. Thirty-four houses partly belonging to the Colliery Company and partly private owners have been almost wholly rebuilt.

Shotton.—One notice for one house, repaired, and closing orders for two houses have been rescinded. At Horden thirty-nine wooden huts were demolished and the ground cleared for permanent buildings.

Hutton Henry.—One notice for one house—closed by magistrates' order.

Murton.—One notice for one house—receiving attention.

Wingate.—Closing orders were asked for two lots of eleven houses for which notices had been served the year before. The owner was given time to do the work, for which he got plans made and passed, but at the end of the notice the work was not begun. Closing orders were again applied for, and a faithful promise being made to do the work without delay, the court extended the time for another three months.

South Hetton.—Twelve notices for thirty-five houses: two were repaired, six improved, ten receiving attention, five nothing done. Twelve were part of a lot of 149 for which notice had been served the year before. They had been



repaired and improved by adding a pantry outside, enlarging upstairs window on one side and putting in hinged skylight on other side, putting a stair instead of a step-ladder and laying a concrete pavement in front, but the Council decided that the walls should be raised to convert the attic into a room with a fireplace, and this the owners refused. To secure this, your Council asked for closing orders, but the magistrates, after personal inspection, refused to grant the order and, instead, withdrew the summonses on condition that improved ventilation be obtained by means of two Boyle's ventilators fixed to each house.

Under the Public Health Act, 298 statutory notices have been served for 986 houses in different localities, with results as follow :—

Easington.—Nine notices for eleven houses : nine to provide pail-closet and dust-bin in place of unsuitable ashpit privies—all carried out ; two for a better water supply—nothing done ; ten privy ashpits have been converted into ash-closets.

Haswell.—Seven notices for ten houses : eight to provide a water supply from an available public company ; two to make drain and other alterations to prevent sewer gas entering the houses—all carried out. At South Hetton sixty-four privy ashpits have been converted into ash-closets.

Shotton.—One notice for one house for overcrowding—abated.

Castle Eden.—Five notices for sixteen houses to disconnect from old unused sewer—carried out ; four privy ashpits have been converted into ash-closets.

Murton.—Thirty-five notices for 265 houses : fifteen to disconnect drains from old sewer and

connect with new—carried out; one overcrowding—abated; eighty-five to convert midden privies into ash-closets—carried out; fifty to connect house drains with new sewers, notices served first on owners, then on lessees—not yet carried out; 114 houses to convert midden privies into ash-closets—not done, notices to be again served. Twelve back-to-back two-roomed houses have been converted into six four-roomed houses. Midden privies for 138 houses have been converted into ash-closets.

Thornley.—Twelve privy middens have been converted into ash-closets.

Wingate.—The Colliery Company, carrying out their scheme, have rebuilt eighteen houses, making them practically new houses. By request they are changing their operations from Seymour Street, where they began, to Sinkers Row. Privy ashpits for 124 houses have been converted into ash-closets. Trimdon.—Nineteen privy ashpits have been converted into ash-closets. Wheatley Hill.—The privy ashpits for two streets of fifty houses have been converted into ash-closets.

Hutton Henry.—164 notices for 381 houses: seven for new houses to be supplied with drainage and water supply; application was made to the magistrates for this object; a period of three months was given to do the work; the drainage was carried out, the water supply is being negotiated. 374 houses to have midden privies converted into ash-closets—356 have been completed.

Monk Hesleden.—Seventy-seven notices for 302 houses to convert privy ashpits into ash-closets and to pave bricked yards with impermeable cement—120 conversions have been made and permission has been given to defer the paving until better weather; one notice for a filthy house—tenant subsequently evicted by landlord.

Seaham.—169 additional ashpit privies have been converted into ash-closets.

The “Public Health Acts (Amendment) Act, 1907” (with a view to the adoption of Parts II., III., IV. and V.), and the “Housing and Town Planning &c. Act, 1909,” have had and are receiving the careful consideration of your Council.

NUISANCES.—265 informal written notices were served by your Inspector for sanitary defects discovered, but not brought to the notice of your Council. They were mostly remedied after the first or a second notice, and were for the following conditions:—Dwelling Houses: foul condition, nineteen; structural defects, fourteen; overcrowding, two; Lodging Houses, five; Cowsheds, forty-eight; Slaughter Houses, fifteen; Ashpits and Privies, seventy-four; Deposits of Refuse and Manure, five; Water-closets, two; Defective Yard Paving, nine; House Drainage: defective traps, twelve; no disconnection from sewers, seven; other faults, nineteen; Water Supply, four; Pigsties, seven; Animals Improperly Kept, six; other nuisances, seventeen.

EXCREMENT AND REFUSE REMOVAL.—For all new colliery and cottage property this is by the ash-closet. In the better-class houses the water-closet inside is adopted, and for a few of the private cottages the water-closet in the yard. In all the old property the privy ashpit was the universal custom. In recent years these have begun to be converted into the ash-closet. During the year an effort has been made to increase this, beginning with those most objectionable in structure or close proximity to the house, with the result that 988 conversions have been effected during the year, and this work will be continued. In a few, where there was difficulty of access to the back yard, the pail-closet and ashbin have been introduced. The work of scavenging and cleansing for the whole



of the village parts of the district is undertaken by the Council and let to contractors. When these are the colliery companies, the work is performed well, when to others, though generally well done, in some, at Murton, Trimdon and South Hetton, the performance has been unsatisfactory, payment has been withheld and the contractors changed. A special Committee has had under consideration a scheme for undertaking the work by a cleansing department, with appliances owned by the Council and manipulated by their own workmen. After full consideration it was decided that the present arrangements, if properly enforced, should work satisfactorily, and it is proposed that an additional Inspector be appointed specially charged with the supervision of scavenging. Next to water supply, efficient scavenging is certainly the most potent factor in preventing the spread of infectious diseases, particularly enteric fever, diphtheria and diarrhœa. The co-operation of the householder in sanitation still leaves much to be desired. Where ash-closets have been provided, ashes and refuse are still deposited on the ground, when there is no excuse. Slops are thrown into the yard and allowed to find their way into the sink, and, worst of all, in the new made streets occupants can be found throwing slops on to the pavement, and even excremental matter into the channels. Warning notices have been posted at different times urging attention to these matters, with little effect. Nothing but vigorous prosecution, with a fine, can prevent this, and every effort should be made to secure a few convictions as a warning.

LODGING HOUSES.—One of these was closed by magistrates' order at Easington. Two remain, one at Easington and one at Shotton. They are registered and inspected. Five notices were served on them for want of cleanliness. Both are in poor condition. They are not much used for regular

workmen ; mostly for persons on tramp. No case of infectious disease was ascertained to occur in any of them, though there is no doubt the tramp system is responsible for the spread of more infectious disease than can be discovered.

**COWSHEDS, DAIRIES AND MILKSHOPS.**—There are forty-eight of these on the register, twelve of which have been added during the year. Most of these have been visited during the year, and forty-eight informal notices have been served for the following defects: light and ventilation, seven; limewashing, eleven; manure heap near to shed, four; dirty condition of udders, four; structural defects, six; overcrowding, three; drainage, seven; dirty floors, six. The water supply to eighteen is from a public company and good, for the remainder a water-course, well or pond is used—not always satisfactory. The regulations were those that came into force on 1st February, 1889. It was decided to adopt the Model Bye-laws of the Local Government Board, with certain modifications drafted by your Medical Officer and Clerk. These have been submitted to the Local Government Board and approved, and are now in force. No case of infectious disease was found in connection with any source of milk supply.

**SLAUGHTER HOUSES.**—There are about forty in the district. Many of these are well kept, more are not. The killing process is frequently carried on in the sale shop. They are occasionally visited, but not periodically. In the absence of registration no specific instructions can be given as to how they may be conducted. Only a gross filthy condition, constituting a common nuisance, may be objected to. Fifteen informal notices for such have been served. Pig killing, for sale, may be carried on by anybody of any animal in doubtful condition. One such case was reported, but the parts were disposed

of before an inspection could be made. In the dwelling house attached to a butcher's premises a case of infectious disease occurred. It was efficiently isolated and no other case resulted.

HOSPITALS, INFECTIOUS DISEASES AND PREVENTION.—Every case of enteric or continued fever, diphtheria, puerperal septicæmia, is individually visited and inquired into by your Medical Officer, and such of the other notifiable diseases as the circumstances of an outbreak may deem necessary to discover their origin and means of propagation. A dangerous fatal case of erysipelas appeared in a lodger before he could be removed to hospital. The body was buried within sixteen hours after death, under the personal superintendence of your officers. Particularly in the occurrence of diphtheria in children has inquiry been made at schools to ascertain the possibility of infection while attending there. Printed instructions are also sent to each house where a disease is notified, disinfectants are supplied, disinfection of premises is frequently performed and, when necessary, infected articles are destroyed and compensation made. Disinfection of schools is performed by the County Authority, after closure, and when notice is given requiring it. School closing, for measles, in three infant departments was ordered. An exceptional outbreak of chicken-pox in a small school, attended only by children from a scattered rural district, called for its closure. The memorandum on "Closure of and Exclusion from School," of September, 1909, has been received from the Local Government Board. The instructions and suggestions contained therein have been noted and will be carried into practice.

The Isolation Hospital with twenty beds and cot in four wards has been maintained with a permanent staff. During the year hospital sinks have been added. The treatment of the walls of



one of the rooms, with a view to preventing dampness and draughts, seems to have been quite satisfactory and the Matron is satisfied with the result. It might be well to extend this treatment to the whole of the rest of the Hospital. The difficulty in retaining the services of suitable caretakers which has been experienced by your Council might be obviated by the erection of a caretaker's lodge with sufficient accommodation. It would also be desirable to connect the two blocks by a covered passage so as to protect the staff from the weather in the event of the second block being brought into use. Fifty-eight cases were admitted: forty-seven enteric and continued fever, eleven diphtheria.

The Joint Small-pox Hospital for this and Sedgefield Rural Districts, with an ambulance van, has been kept in order by a couple as caretakers, and is ready to receive patients at a moment's notice.

The year's statistics shew, first, a marked decrease in the birth rate, following, as it usually does, the prosperity or depression in trade. It is 3·38 below the previous year and 1·88 below the average of the previous ten years. As before, it was lowest in the agricultural part of the population, Castle Eden group, 24, and highest in the mining, Shotton, 41.

The death rate, which the previous year was the lowest on record, is lower again, less than the previous year by 0·56, and than the average of the previous decennium by 2·44. The infantile mortality rate is very much the lowest on record, in spite of the lower birth rate, which is still more favourable. In the different localities its variation corresponded generally with their birth rates. Printed instructions about the feeding and management of infants are given to parents when

registering a birth. The illegitimate birth rate was gratifyingly low, 1·03 per thousand of population, as before, below that for England and Wales. The males just over 50 per cent., and the infant mortality was lower than that among the legitimate.

Numerous sub-committees have been appointed to consider drainage schemes, water supply, street making, insanitary property, building bye-laws and scavenging. Several special reports were made by your Medical Officer, particularly one on the sanitary condition of a railway station. Among special replies to the Local Government Board was one on Unqualified Practice in the district. Fifteen deaths were registered as uncertified.

The condensed report of new work accomplished and proceedings taken for the removal and repair of old properties indicates the work entailed by your Council and their officers during the year. There is much in hand and more contemplated. To bring this forward, a permanent qualified assistant, a temporary assistant and a practical plumber have been added to the Surveyor's staff. An additional Sanitary Inspector is urgently needed.

I purpose that instead of making promiscuous house-to-house inspections as heretofore, these be begun at one point in each village and continued from there systematically until that village is completed, separately from inspections required by special complaints. Also, that the record of these inspections for each village or locality shall be kept together in a continuous series in one book, which will simplify reference.

In the early part of the year a general inspection of the district was made by Dr. R. W. Johnstone, one of the Local Government Board's Medical Officers. His report, with recommendations, is now in your hands and awaits your consideration.

The population has increased 4·2 per cent. on the previous year and 24·5 per cent. on the average of the previous decennium. The estimation has been made, as usual, by a comparison of the number of inhabited houses with the index obtained at the census of 1901.

The following table shews the chief vital statistics for 1909 compared with those for the administrative county per thousand of population. Those for fever and diphtheria are the most unfavourable, the former mainly owing to the outbreak at Hutton Henry and the latter at Murton. The worst is the infant mortality, which under existing circumstances cannot be easily remedied.

				Easington	Adminis- trative County
Birth rate	...	...	...	34·85	35·5
Death rate	...	...	...	16·10	15·7
Zymotic	...	...	...	1·54	1·61
Infant mortality rate (per 1,000 births)	...	...	...	153	124
Small-pox	...	...	...	<i>Nil</i>	<i>Nil</i>
Scarlet fever	...	...	...	0·05	0·09
Diphtheria and membranous croup	...	...	...	0·35	0·17
Fever (enteric and continued)				0·28	0·12
Measles...	...	...	...	0·80	0·37
Whooping-cough	...	...	...	0·05	0·25
Diarrhœa	...	...	...	0·66	0·59
Phthisis...	...	...	...	0·68	0·91
Other tubercular diseases	...			0·80	0·73
Acute respiratory diseases	...			2·20	2·38



## FACTORY AND WORKSHOPS ACT, 1901.

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Every factory, workshop, workplace and bakery on the register has been visited by your Inspector at least once. Where females and young persons are employed, and the workshop is for a sedentary occupation, they have been visited oftener by your Medical Officer. Fourteen have been removed, where work has ceased to be carried on, and sixteen have been added.

FACTORIES.—In one of these, where dry-closet accommodation was provided for the males and the females were accommodated off the premises while alterations were being proceeded with, satisfactory separate water-closets have been provided in the premises for each sex. A statutory notice was served upon one owner where both sexes were employed and the sanitary accommodation was insufficient.

WORKSHOPS AND WORKPLACES.—In some of the larger workshops notices have been served for a foul condition of the lavatory accommodation where the structure has been satisfactory, and for one defective structure and badly-kept adjoining yard. Verbal notices for lack of cleanliness and defective ventilation have also been made and attended to readily. Many of the dressmakers carry on the business in a living-room—in six of them it was also a bedroom. This is undesirable,

but the business is always on a small scale and cannot be prevented without hardship to people struggling. No case of infectious disease has been found in any of them. In the larger places the conditions under which females work are generally satisfactory.

BAKEHOUSES.—Three of these are connected with a house and retail shop in a small way. One larger and most satisfactory, and one is a restaurant not connected with a dwelling-house.

HOMEWORK.—There is still no work under this definition carried on in the district.

The list in the register is now as follows:—

#### FACTORIES—

Brickmaking	...	...	...	...	6
Brewery and ærated waters	...	...	...	...	3
Electricity generating	...	...	...	...	2
Cartwright	...	...	...	...	1
Limestone quarry	...	...	...	...	1
				—	13

#### WORKSHOPS—

Joiners and Cartwrights	...	...	...	...	12
Blacksmiths	...	...	...	...	14
Tailors	...	...	...	...	4
Dressmaking	...	...	...	...	26
Cabinets	...	...	...	...	6
Millinery	...	...	...	...	10
Cobbling	...	...	...	...	8
Watch and clock cleaning	...	...	...	...	3
Saddler	...	...	...	...	1
Coach painting	...	...	...	...	2
Cycle repairing and engineering	...	...	...	...	2
				—	88

Carried forward...101

Brought forward...101

## WORKPLACES—

Grocery and Drapery	...	...	...	5
Drapery and Clothing	...	...	...	3
Beer bottling	...	...	...	2
Social Clubs	...	...	...	4
Grocery	...	...	...	4
				— 18
BAKEHOUSES	...	...	...	5
				— 5
				—
				Total...124

I remain, Gentlemen,

Your obedient Servant,

**JAMES ARTHUR,**

L.R.C.P.E., L.R.C.S.E., D.P.H.R.C.P.E.,

Medical Officer of Health.

*To the Easington Rural District Council.*



TABLE I

## EASINGTON RURAL DISTRICT

Vital Statistics of whole District during 1909 and previous Years

YEAR	Population estimated to Middle of each Year	BIRTHS		TOTAL DEATHS REGISTERED IN THE DISTRICT				TOTAL DEATHS IN PUBLIC INSTITUTIONS IN THE DISTRICT	Deaths of Non-residents registered in Public Institutions in the District	Deaths of Residents registered in Public Institutions beyond the District	NET DEATHS AT ALL AGES BELONGING TO THE DISTRICT	
		Number	* Rate	Under 1 Year of Age		At all Ages					Number	* Rate
				Number	Rate per 1,000 Births registered	Number	* Rate	Number	* Rate			
1	2	3	4	5	6	7	8	9	10	11	12	13
1899	39,293	1,372	34.91	276	201	746	18.72	24	6	14	754	19.18
1900	40,194	1,428	35.52	238	166	739	18.38	35	13	13	739	18.38
1901	40,997	1,656	40.39	312	188	837	20.41	35	9	23	851	20.75
1902	43,761	1,659	37.91	282	169	797	18.21	23	7	24	814	18.60
1903	44,117	1,640	37.17	272	165	794	17.99	22	1	19	812	18.40
1904	45,363	1,687	37.18	291	172	819	18.05	32	9	15	825	18.18
1905	47,160	1,642	34.81	287	174	874	18.53	39	5	22	890	18.87
1906	49,181	1,808	36.76	317	175	913	18.56	36	11	27	929	18.88
1907	52,336	1,809	34.56	295	162	898	17.15	40	5	24	917	17.52
1908	54,614	2,088	38.23	339	162	917	16.77	40	16	14	910	16.66
Averages for years 1899-1908	45,701	1,678	36.73	291	173	833	18.27	33	8	19	844	18.54
1909	56,922	1,984	34.85	304	153	† 902	15.84	29	7	29	917	16.10

\* Rates in Columns 4, 8 and 13 calculated per 1,000 of estimated population.

NOTE.—The deaths included in Column 7 of this table are the whole of those registered during the year as having actually occurred within the district or division. The deaths included in Column 12 are the number in Column 7 corrected by the subtraction of the number in Column 10 and the addition of the number in Column 11.

By the term "Non-residents" is meant persons brought into the district on account of sickness or infirmity and dying in public institutions there; and by the term "Residents" is meant persons who have been taken out of the district on account of sickness or infirmity and have died in public institutions elsewhere.

† Seven deaths by accident of Non-residents are also deducted.

Area of District in acres (exclusive of area covered by water)	Total population at all ages ...			40,997	At Census of 1901
	Number of inhabited houses ...			7,784	
	Average number of persons per house ...			5.26	

I Institutions within the District receiving sick and infirm persons from outside the District	II Institutions outside the District receiving sick and infirm persons from the District	III Other Institutions, the deaths in which have been distributed among the several localities in the District
Easington Union Workhouse	County Asylum, Sedgfield	Sunderland Infirmary Hartlepool Hospital Seaham Harbour Infirmary Sherburn Hospital County Hospital, Durham Harton Workhouse

# TABLE II

## EASINGTON RURAL DISTRICT

Vital Statistics of separate Localities in 1909 and previous Years

NAMES OF LOCALITIES	EASINGTON				HASWELL				SHOTTON				CASTLE EDEN, HAWTHORN, BURDON, COLD HESLEDEN, DALTON-LE-DALE				EAST MURTON				KELLOE AND THORNLEY				WINGATE				MONK HESLEDEN, HUTTON HENRY, SHERATON, HULAM, NESBIT				SEAHAM, SEATON, SLINGLEY			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
YEAR	Population estimated to middle of each year	Births registered	Deaths at all Ages	Deaths under 1 year	Population estimated to middle of each year	Births registered	Deaths at all Ages	Deaths under 1 year	Population estimated to middle of each year	Births registered	Deaths at all Ages	Deaths under 1 year	Population estimated to middle of each year	Births registered	Deaths at all Ages	Deaths under 1 year	Population estimated to middle of each year	Births registered	Deaths at all Ages	Deaths under 1 year	Population estimated to middle of each year	Births registered	Deaths at all Ages	Deaths under 1 year	Population estimated to middle of each year	Births registered	Deaths at all Ages	Deaths under 1 year	Population estimated to middle of each year	Births registered	Deaths at all Ages	Deaths under 1 year	Population estimated to middle of each year	Births registered	Deaths at all Ages	Deaths under 1 year
1899	1,480	41	45	6	5,407	187	135	46	1,302	27	15	1	3,071	69	33	11	5,764	255	120	38	3,888	156	75	22	8,000	325	167	67	4,218	138	69	28	6,168	174	97	37
1900	1,606	57	36	8	5,928	184	101	30	1,773	47	36	9	3,094	83	43	9	5,943	249	105	45	3,978	154	74	18	7,706	321	146	52	4,628	142	100	35	5,538	191	98	32
1901	1,731	47	41	8	5,512	229	87	28	2,324	87	45	13	3,300	111	59	12	6,541	296	133	52	3,989	154	89	34	8,005	347	166	72	4,051	164	106	42	5,544	221	125	51
1902	2,060	59	46	12	5,800	239	127	47	3,040	99	53	20	3,239	121	44	13	6,715	292	130	51	3,784	157	96	35	8,091	334	144	52	5,349	163	70	19	5,683	195	104	33
1903	1,990	46	28	6	6,180	229	100	33	3,708	136	86	32	3,008	101	53	14	6,401	279	119	41	3,908	147	77	26	8,043	342	192	71	5,196	167	83	26	5,683	193	74	23
1904	2,067	67	39	10	6,417	225	128	41	4,234	181	90	33	3,113	93	56	27	6,501	262	120	35	4,034	169	60	24	8,553	324	151	65	5,279	179	86	25	5,165	187	95	31
1905	2,197	62	38	11	6,575	221	117	34	5,170	167	96	34	3,444	89	50	15	6,711	257	149	55	3,997	161	96	28	8,575	310	165	53	5,380	187	76	23	5,111	188	103	34
1906	2,197	58	45	11	6,575	241	132	49	6,775	240	122	43	3,524	118	54	18	6,806	276	115	39	4,092	160	75	22	8,651	335	181	60	5,450	189	106	35	5,111	191	99	38
1907	2,064	62	25	2	6,533	231	131	51	8,263	325	133	52	3,608	96	56	8	7,174	266	131	38	4,671	143	88	33	8,977	310	153	52	5,607	189	95	29	5,439	187	105	28
1908	2,239	69	40	8	6,622	236	117	37	9,967	447	174	89	3,766	112	43	16	7,311	289	105	32	4,160	181	79	35	9,099	347	183	67	5,775	221	94	33	5,675	186	75	22
Averages of Years 1899 to 1908	1,963	57	38	8.2	6,154	222	117	39	4,656	175	85	32	3,316	99	49	14	6,586	272	122	42	4,050	158	81	28	8,370	329	165	60	5,093	174	88	29	5,511	191	97	33
1909	2,312	66	44	8	6,764	240	99	39	10,598	441	193	77	3,771	93	43	13	7,479	248	114	26	4,139	166	81	33	9,762	336	148	54	6,080	202	93	28	6,017	192	102	26

NOTE.—(a) Deaths of residents occurring beyond the district are included in sub-columns c of this table, and those of non-residents registered in the district excluded.

(b) Deaths of residents occurring in public institutions are allotted to the respective localities according to addresses of the deceased.





TABLE III

## EASINGTON RURAL DISTRICT

Cases of Infectious Disease notified during the Year 1909

NOTIFIABLE DISEASE	CASES NOTIFIED IN WHOLE DISTRICT							TOTAL CASES NOTIFIED IN EACH LOCALITY									NUMBER OF CASES REMOVED TO HOSPITAL FROM EACH LOCALITY									
	At all Ages	At Ages—Years						Easington H. W. 1	Haswell 2	Shotton 3	Castle Eden, Hawthorn, Burdon, Cold Hesleden, Dalton-le-Dale 4	East Murton 5	Kelloe and Thornley 6	Wingate S. H. 7	Monk Hesleden, Hutton Henry, Sheraton, Hulam, Nesbit 8	Seaham, Seaton, Slingey 9	Easington 1	Haswell 2	Shotton 3	Castle Eden, Hawthorn, Burdon, Cold Hesleden, Dalton-le-Dale 4	East Murton 5	Kelloe and Thornley 6	Wingate 7	Monk Hesleden, Hutton Henry, Sheraton, Hulam, Nesbit 8	Seaham, Seaton, Slingey 9	Total Cases removed to Hospital 10
		Under 1	1 to 5	5 to 15	15 to 25	25 to 65	65 and upwards																			
Small-pox...																										
Cholera ...																										
Diphtheria and membranous croup	107		33	66	6	2		5	5	15	12	33	5	16	7	9	4		2	1			3	1		11
Erysipelas ...	69	3	3	9	7	38	9	2	6	30		7	8	11	4	1										
Scarlet fever ...	241	2	95	133	8	3		1	13	27	27	5	24	87	52	5										
Typhus fever ...																										
Enteric fever ...	89		5	30	27	26	1	1	2	17	6	6	8	21	26	2	1	1	15	3	2	5	9	10		46
Relapsing fever ...																										
Continued fever ...	13		4	2	4	3			5		1		1	4	2			1								1
Puerperal fever ...	3				2	1				1	1					1										
Plague ...																										
Measles ...																										
Whooping-cough																										
Totals...	522	5	140	240	54	73	10	9	31	90	47	51	46	139	91	18	5	2	17	4	2	5	12	11		58

H.—Easington District Infectious Hospital. W.—Union Workhouse. S. H.—Easington and Sedgefield Con-joint Small-pox Hospital.





TABLE IV

## EASINGTON RURAL DISTRICT

Causes of and ages at Death during Year 1909

CAUSES OF DEATH	DEATHS IN OR BELONGING TO WHOLE DISTRICT AT SUBDIVIDED AGES							DEATHS IN OR BELONGING TO LOCALITIES AT ALL AGES								TOTAL DEATHS IN PUBLIC INSTITU- TIONS IN THE DISTRICT	
	All Ages	Under 1 year	1 and under 5	5 and under 15	15 and under 25	25 and under 65	65 and up- wards	Easington	Haswell	Shotton	Castle Eden, Hawthorn, Burdon, Cold Hesleden, Dalton-le-Dale	East Merton	Keloe and Thornley	Wingate	Monk Hesleden, Hutton Henry, Sheraton, Hulam, Nesbit		Seatham, Seaton, Stingley
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Small-pox ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Menses ...	46	11	35	...	...	...	...	2	3	10	1	11	5	4	2	8	...
Scarlet fever ...	3	...	3	...	...	...	...	...	1	1	...	...	...	1	...	...	...
Whooping-cough ...	3	2	1	...	...	...	...	...	...	2	...	...	1	...	...	...	...
Diphtheria and membranous croup ...	20	11	9	...	...	...	...	1	2	4	2	8	...	2	1	...	...
Croup ...	1	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
(Typhus	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fever Enteric	15	1	3	5	6	1	...	...	1	2	...	1	1	4	6	...	8
Other continued	1	...	...	...	2	...	...	...	1	1	...	...	...	...	1	...	...
Epidemic influenza ...	3	...	...	...	...	...	...	...	1	1	...	...	...	...	1	...	...
Cholera ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Plague ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diarrhoea ...	38	28	9	1	...	...	...	1	1	8	4	1	4	6	4	9	...
Enteritis ...	20	11	7	...	...	...	2	1	1	9	1	1	1	1	2	3	...
Gastritis ...	6	...	2	1	...	2	1	1	1	1	1	...	1	1	...	1	...
Puerperal fever...	1	...	...	1	...	...	...	1	...	...	...	...	...	...	...	...	...
Erysipelas ...	4	1	...	1	...	2	...	...	6	7	...	7	2	8	1	6	2
Phthisis ...	39	...	1	3	11	23	1	1	...	...	...	...	...	...	...	...	...
Other tubercular diseases ...	46	9	19	7	3	8	...	4	4	13	1	8	5	6	2	3	1
Cancer, malignant disease ...	24	...	...	...	...	16	8	2	4	3	2	4	1	1	5	2	...
Bronchitis ...	53	22	7	...	1	12	11	...	6	19	3	5	5	9	3	3	1
Pneumonia ...	71	19	20	5	5	20	2	4	5	16	2	11	6	13	5	9	1
Pleurisy ...	5	...	1	1	...	3	...	1	...	1	...	1	1	1	...	...	...
Other diseases of respiratory organs ...	15	1	3	1	5	5	...	...	1	2	1	2	2	3	2	2	...
Alcoholism Cirrhosis of liver }	2	...	...	...	1	1	1	...	...	...	...	1	1	...	...	...	...
Venereal diseases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Premature birth	63	63	...	...	...	...	...	3	12	16	3	6	6	10	6	1	...
Diseases and accidents of parturition ...	7	1	...	...	1	5	...	...	...	4	...	1	...	1	...	1	...
Heart diseases ...	51	1	...	3	1	29	17	2	5	8	6	5	2	9	8	6	2
Accidents ...	36	2	6	7	6	11	4	3	3	8	3	2	3	8	4	2	...
Suicides ...	3	...	...	...	...	3	...	...	...	...	...	...	...	...	3	...	...
All other causes	341	133	24	7	6	64	107	17	43	56	12	39	34	58	36	46	14
All causes...	917	304	151	49	40	213	160	44	99	193	43	114	81	148	93	102	29



TABLE V

## EASINGTON RURAL DISTRICT

## INFANTILE MORTALITY DURING THE YEAR 1909

Deaths from stated causes in weeks and months under One Year of age

CAUSE OF DEATH		Under 1 Week	1-2 Weeks	2-3 Weeks	3-4 Weeks	Total under 1 month	1-2 Months	2-3 Months	3-4 Months	4-5 Months	5-6 Months	6-7 Months	7-8 Months	8-9 Months	9-10 Months	10-11 Months	11-12 Months	Total Deaths under One Year
All Causes	Uncertified...	85	14	11	10	120	25	26	21	21	10	10	19	7	13	13	12	297
	Certified ...	2	1		1	4				1				1			1	7
Common Infectious Diseases	Small-pox ...																	
	Chicken-pox ...																	
	Measles ...												1	3	1	3	1	12
	Scarlet fever ...																	
	Diphtheria : croup ...																	
Diarrhoeal Diseases	Whooping-cough ...																	2
	Diarrhoea, all forms ...																	
	Enteritis, muco-enteritis, gastro-enteritis }							1	1									27
	Gastritis, gastro-intestinal catarrh }																	
	Premature birth ...	46	4	5	3	58	2	2	1									63
Wasting Diseases	Congenital defects ...	13	2		2	17	1			1								19
	Injury at birth ...	7				7												7
	Want of breast-milk : starvation }																	
Tuberculous Diseases	Atrophy, debility, marasmus }	13	4	5	2	24	5	6	6	2	3	3	2	1	2	3	1	58
	Tuberculous meningitis ...																	
	Tuberculous peritonitis : tabes mesenterica }									1						2	2	5
	Other tuberculous diseases }								1				1		1			3
	Erysipelas ...									1								1
Other Causes	Syphilis ...															1		1
	Rickets ...																	
	Meningitis (not tuberculous) }																	
	Convulsions ...	6	5		3	14	1	5	5	5	1	1	3	1	2	1	2	41
	Bronchitis ...						6	2	3	3	1		2	2	1		2	22
	Laryngitis ...																	
	Pneumonia ...						3	2	2	2	2	1	3	1	1	1	1	19
	Suffocation : overlying ...																	
Other causes ...		2				2		1	1	1	1	1	2	2				13
		87	15	11	11	124	25	26	21	22	10	10	19	8	13	13	13	304

Births in the year { Legitimate ... 1,925.

Population estimated to middle of 1909 ... 56,922.

{ Illegitimate ... 59.

{ Legitimate Infants ... 298.

Deaths from all causes at all ages ... 917.

Deaths in the year of { Illegitimate Infants ... 6.





TABLE VI

## EASINGTON RURAL DISTRICT

Plans approved during the year 1909 and Certificates of Habitation issued

Township	Parish	Colliery Houses : Ordinary	Colliery Houses : Better Class	Private Owners' Houses : Ordinary	Private Owners' Houses : Better Class	Shops and Houses, and Shops	Villas	Double or Back-and-Front Houses	Chapels, Schools and Halls	Stables	Township Totals
Thornley ...	Thornley ...	1	2	3	4	5	6	7	8	9	
Wingate ...	Castle Eden ...			2	30	1		4	1		27
Station Town ...	Hutton Henry						1				38
Deaf Hill ...	Wingate			18	2	1			1		1
New Seaham ...	Seaham			79	2	2					22
Murton Colliery	East Murton			1		2		4	1	1	83
Wheatley Hill	Wingate			16	8	2			1		9
South Hetton ...	Haswell			5	53			2		1	27
Horden ...	Shotton	279	41			5			3		61
Hutton Henry	Hutton Henry			1			3				328
Blackhalls ...	Monk Hesleden	527	15			4					4
Haswell ...	Haswell			2	1	1	1		1	2	546
Easington Colliery	Easington, with Thorpe	56				1			1		8
Castle Eden Colliery...	Monk Hesleden			2		2					58
Shotton Colliery	Shotton				5	1					4
Easington ...	Easington, with Thorpe			44	1						6
Grand Totals	...	862	56	186	111	22	5	10	†11	4	45
Grand Totals of Certificates of Habitation issued ...	...	59	*86	104	27	13	*10	*23	1		1,267
											323

\* Part Plans approved during previous year. † Six of these are County Council Schools.

